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ABSTRACT

In 1968, a random sample of 70 Wesleyan University juniors participated in a study designed to: 1) determine the extent of drug usage among students; 2) investigate the social and psychological characteristics of users and non- users of marijuana; 3) investigate the attitudes and motivations of persons who had reacted differently to the increasing availability of marijuana. (MS)

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Social and Psychological Characteristics Associated with the use of Marijuana by College Men

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Social and Psychological Characteristics Associated with the use of Marijuana by College Men

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When students of the class of 1969 enrolled at Wesleyan University as freshmen in the fall of 1965, only a few individuals in the class had had any personal contact with the use of marijuana. To that time, there had been little or no use of the substance on the campus and drug usage was not an issue that attracted much attention or interest. By the spring of 1968, the use of psychoactive materials was well publicized and had become a matter of widespread concern. The study reported here was undertaken (1) to determine the extent of drug usage among students at a selective New England college for men, (2) to investigate the social and psychological characteristics of users and non-users of marijuana and (3) to develop some clues as to the attitudes and motivations of persons who had reacted in different ways to the increasing availability and acceptability of marijuana.

Members of the class of 1969 were selected for this study because (1) during their college years there had been a rapid and radical change in the availability and amount of use of marijuana at the University and in the larger society, and (2) there existed a substantial pool of data that had been collected at the time of their matriculation and a limited amount of follow-up information obtained in subsequent semesters.

Procedure

A roster of persons who entered Wesleyan University in September 1965 and who had been enrolled as full-time students in each of six successive semesters was prepared. From this roster a random sample of 85 individuals was drawn. These persons were met individually and personally (usually in their room) by a student from the class of 1969*. He explained the project and requested their participation which involved the following: (1) completing a 30 item questionnaire, (2) completing the Adjective Check List, Gough & Heilbrun, and (3) giving permission to use test data on file in the Office of Psychological Services. From the test battery administered September 1965 the following tests and inventories were used: (1) California Psychological Inventory, (2) Strong Vocational Interest Blank, (3) Adjective Check List, Gough & Heilbrun, (4) Myers-Briggs Type Indicator, (5) SAT Verbal and Math, (6) CEEB English Composition, (7) Concept Mastery Test, (8) Davis Reading Test, (9) Survey of Study Habits and Attitudes, Form C, Brown-Holtzman, and (10) College Student Questionnaire, Part 1. The College Student Questionnaire, Part 2, which had been administered in May 1967 at the close of

* The writer gratefully acknowledges the assistance of David Heppel, '69, in conducting this phase of the project.

their sophomore year was also included in the analysis.

The data from these tests and inventories was punched into IBM cards with all identifying information removed. The cards were placed in an envelope that was identified only by a detachable label. The completed questionnaire and the Adjective Check List were placed into the envelope by the student who then sealed the envelope and removed the identifying label. The envelopes were assigned code numbers that were used to identify the contents of the envelope when it was opened after all the participating students had completed the questionnaire and the A.C.L. In this manner the records of an individual could be collated although he was assured complete anonymity and confidentiality. Seventy of the 85 individuals (82%) drawn in this sample completed the questionnaire and the Adjective Check List. With few exceptions all the test data listed above was available for each of the participants.

To obtain some evidence of the representativeness of this sample, the sample and the class from which it was drawn were compared in respect to several variables for which information was available. These comparisons provide no basis for rejecting the hypothesis that the group of students participating in this study are a random sample of the total class.

Insert Table 1

The individuals who participated in this study had been resident in the college community for six consecutive semesters at the time of the study. They ranged in age from 19 to 22 years. All were male; sixty-seven of the seventy participants regarded themselves as caucasian.

Use of Marijuana

Of the 70 individuals in this study, 29 or 41% reported that they had never used marijuana. Twenty-five individuals indicated that they had not smoked it more frequently than once a month during the current academic year (subsequently referred to as "infrequent users"). Sixteen individuals indicated that during the academic term 1967-68 they smoked marijuana at least once a week (designated as "frequent users"). Of those that reported any use of marijuana, only 3 had smoked it before coming to college. Twenty-seven or 63% of the users had had their first experience with marijuana during their second year in college and 6 or 14% had not used it until the current year. Most reported that they were introduced to marijuana by fellow students or near-aged friends. Frequent users alone reported that their introduction to marijuana was self-initiated.

Table 1

Characteristics of the Experimental Sample and the Total Class

A. Freshman Year Academic Average

	Sample	Class
90.0 and above	3.1%	4.4%
86.7 - 89.9	12.5	14.8
83.4 - 86.6	7.8	11.6
80.0 - 83.3	35.9	29.0
76.7 - 79.9	26.6	22.5
73.4 - 76.6	7.8	10.9
73.3 and below	6.3	6.8
N	64	293

B. Field of Concentration

Language and Literature	20.0%	18.2%
Performing Arts	1.4	3.7
Social Sciences	27.1	35.3
Philosophy and Religion	5.7	3.1
Psychology and Anthropology	11.4	11.1
Natural Science and Mathematics	7.1	11.7
College Programs	11.4	11.1
Interdepartmental Majors	15.7	5.7

C. Parents Religious Preference

Protestant	38.3%	39.9%
Catholic	10.0	9.0
Jewish	15.0	13.3
Other	3.3	1.9
No Formal Religion	33.3	35.8

D. 131 and 134, College Student Questionnaire, Part 2

The following paragraphs are descriptive statements of four personal philosophies. . . . As you read the four statements, attempt to determine how close each comes to your own philosophy of higher education.

Philosophy A (Vocational)

Most Accurate	9.8%	12.8%
Second Most Accurate	29.5	25.0
Third Most Accurate	21.3	25.6
Least Accurate	39.3	36.7

Table 1 (continued)

Philosophy D (Non-conformist)

	Sample	Class
Most Accurate	27.4%	21.1%
Second Most Accurate	11.3	17.7
Third Most Accurate	16.1	16.9
Least Accurate	45.2	44.3

Only 15% of the infrequent users reported a bad reaction to their use of marijuana but 50% of the frequent users stated that they had had a bad reaction at some time. Paranoia, dullness and difficulty in staying awake were reported most frequently; infrequently reported were (1) unpleasant sensations, (2) fear, and (3) panic reactions. Seventy-five percent of the students that smoked marijuana frequently described the experience as pleasurable and judged it to have positive value. Thirteen percent made neutral, descriptive statements, 6% gave ambivalent reactions and none described their experiences with marijuana in terms that were predominantly unfavorable. Of the infrequent users, half as many (37%) described their reactions to marijuana in positive, pleasurable terms. Eleven percent stated that they had experienced no significant effect from smoking marijuana, 11% described the experience as unpleasant or ambivalent and 26% made neutral, non-evaluative comments concerning their reaction to marijuana. Table 2 lists the responses to the question: "Mark the statement that is most descriptive of your present attitude."

Table 2

	Non-Users	Infrequent	Frequent
Do not intend to use marijuana	67%	26%	-%
Will experiment with marijuana but will not continue with its use	33	22	-
Will use marijuana occasionally and selectively	-	48	50
Will use marijuana regularly	-	4	50

Students that had not used marijuana also reported that they had never used any other hallucinogenic drug. Twenty-six percent of infrequent users and 62% of frequent users reported having used LSD. Table 3 lists in greater detail their response to the question: "Have you taken any of the drugs listed below?"

Table 3

	Infrequent Users of Marijuana		Frequent Users of Marijuana	
	1-5 times	More than 5 times	1-5 times	More than 5 times
LSD	22%	4%	43%	19%
DMT	4	-	38	6
Mescaline	7	-	25	-
Hashish	4	-	12	31
Morning Glory Seeds	4	-	19	-

By the spring of 1968, students who were interested in and had a sympathetic attitude toward the use of drugs had little difficulty in obtaining psychoactive substances. Almost half of the students who did not use marijuana reported that they had been offered access to some hallucinogenic drug. To the question, "Have you been offered access to any hallucinogenic drug by an individual associated with the University?" the percentage of those responding "yes" were:

Non-users of marijuana	46%
Infrequent users of marijuana	73%
Frequent users of marijuana	88%

The following items from the questionnaire suggest that students who used marijuana frequently had a history of using other substances that have a relaxing or a stimulating effect. More users than non-users drank beer and liquor and used tobacco. The relationship between frequent use of marijuana and heavy cigarette smoking is particularly marked. The regular use of marijuana appears to be associated with a reduction in the amount of alcohol consumed. "In comparison with your use of <u>beer</u> during this year, would you estimate that during your freshman year you drank:"

	Non-Users	Infrequent	Frequent
None	48%	15%	38%
Decidedly or slightly less	52	34	19
Decidedly or slightly more	-	51	43

"In comparison with your use of alcoholic beverages other than beer during this year, would you estimate that during your freshman year you drank:"

None	67%	30%	15%
Decidedly or slightly less	30	38	18
Decidedly or slightly more	3	32	57

"Do you smoke cigarettes?"

Never	74%	41%	13%
Light smoker or former smoker	22	27	43
Heavy smoker	4	32	44

"Do you smoke cigars or a pipe?"

Never	59%	41%	19%
Occasionally	30	48	69
Regularly	11	11	12

A greater proportion of the students who reported use of marijuana than of the non-users grew up in cities with a population in excess of 500,000 or in the suburbs of a metropolitan area. More attended public high schools. Only 36% of the non-users graduated in classes larger than 300 students while 42% of the infrequent users and 53% of the frequent users graduated in classes that large. With much greater frequency, non-users selected as descriptive of their parents' policy of child rearing the statement: "Parents suggest without coercing; parents hope that children will understand reasons for regulations; parents ready and willing to explain and interpret." (Non-users 80%, infrequent 80%, frequent 61%). Only 8% of the non-users in comparison with 16% of infrequent users and 31% of frequent users selected the statement: "All policy in the hands of parents; parents only source of control; parents dominating and authoritarian." In the families of users, the father was indicated more frequently as the parent who had final say about things concerning the children (non-users 59%, infrequent 67%, frequent 77%). Fifty-four percent of the non-users list their father's occupation as managerial or professional. For infrequent users the percentage is 63 and for frequent users, 75. Fifty-two percent of the fathers of non-users did not complete college in comparison to 32% for the infrequent and 39% for the frequent users. The differences are larger in respect to the education of the mother. Seventy-two percent of the mothers of non-users did not complete college while 54% of the mothers of infrequent users and 46% of the mothers of frequent users did not complete college. The religious preference of users and non-users and that of their parents also is systematically different. "What is your parents' religious preference?"

	Non-Users	Infrequent	Frequent
Protestant	61%	46%	46%
Catholic	19	12	7
Jewish	19	24	14
Other	-	4	7
No formal religion	-	12	15

"What is your religious preference?"

	1965	1968	1965	1968	1965	1968
Protestant	52%	33%	24%	11%	38%	19%
Catholic	20	22	8	-	8	6
Jewish	16	11	12	11	8	6
Other	4	-	8	19	8	13
No formal religion	8	33	48	59	38	56

At the time of entering college, more non-users expressed an intention to join a fraternity or social club. In the subsequent years, a greater proportion of non-users did join and remain active members and maintained a more favorable attitude toward fraternities.

September 1965: "Do you hope to join (pledge) a social fraternity or club sometime during the coming year?"

	Non-Users	Infrequent	Frequent
"Yes"	88%	78%	69%

May 1967: "Are you a member of a social fraternity or club?"

Active member	68%	48%	33%
Had pledged or joined but now inactive or disaffiliated	12	7	33
No, but interested in joining	8	8	-
No, and not interested in joining	12	36	33

"If you had it to do over again, and aside from cost, would you:"

Join the same fraternity	63%	64%	14%
Join a different one	21	7	14
Not join at all	16	21	57
Other	-	8	15

"Regardless of whether or not you are a member of a social fraternity, how do you feel about social fraternities in general?"

Strongly or moderately approve	75%	58%	39%
Indifferent	12	8	38
Strongly or moderately disapprove	13	33	23

In contrast to 7% of the non-users, 56% of the frequent users were undecided about their intended major at the time that they entered college (infrequent 26%). When they did select a major, most of the frequent users chose one of the fields in humane studies while the majority of non-users and infrequent users selected majors in the social, behavioral or natural sciences. There was a suggestion of this preference in the secondary school subjects that were reported as "most enjoyed" and "least enjoyed". "Of the subjects listed below, which one did you enjoy most in secondary school?"

English	12%	32%	54%
Foreign Languages	12	12	15
Mathematics	21	-	-
Sciences	12	28	-
Social Sciences	38	24	23
Music	4	4	8

"Of the subjects listed below, which one did you enjoy least in secondary school?"

	Non-Users	Infrequent	Frequent
English	4%	-%	-%
Foreign Languages	19	33	38
Mathematics	23	17	15
Sciences	19	17	15
Social Sciences	8	4	23
Music or Art	12	8	-
Other	15	21	8

As entering freshmen 77% of the frequent users expressed a desire to participate very actively in literary, oratorical or dramatic extracurricular activities in contrast to 38% of the infrequent users and 46% of the non-users. They reported reading more literary works and fewer in the field of social science. "Which of the following categories best describes most of the outside reading (i.e., not required) you have done during the past year? (Mark only one.)"

History, economics, anthropology, current political and social issues, social criticism, etc.	32%	23%	15%
Novels, short stories, drama, poetry, literary criticism, etc.	44	69	77

From many lines of evidence, it would appear that those persons who become involved in the frequent use of marijuana had established to a considerably greater degree than infrequent or non-users, a history of not relating easily or productively to their secondary school opportunities, to their families or to their peers. They expressed a greater uncertainty about their own adequacies and their ability to accept the common societal conventions and expectations. Their responses to a variety of questions indicated divergent thinking, ambivalence and suspended judgment or delay. They give expression to stronger and more pervasive feelings of dissatisfaction and disaffection.

The following excerpts from the College Student Questionnaire, Part 1, illustrate the generalization that users, and particularly frequent users, were less involved in their secondary level education, experienced less satisfaction, and achieved less personal recognition.

Item 57: "Academically, where did you stand in your class? Would you say your over-all grades put you among the:"

Top 5%	46%	38%	25%

Item 63: "What was your approximate grade average for your senior year (or your last year in high school if you did not graduate)?"

	Non-Users	Infrequent	Frequent
A	50%	27%	15%
B	37	69	77
C	12	4	8

Item 87: "Would you say that you senior year grades:"

Slightly or grossly under-represented your ability	31%	72%	69%

Item 85: "In terms of your own personal satisfaction, how much importance do you attach to getting good grades?"

Quite a bit or a great deal	65%	58%	38%

Item 86: "All things considered, how satisfied were you with the grades you received during your senior year?"

Somewhat or very dissatisfied	19%	35%	53%

Item 77: "Did other interests (sports, extracurricular activities, or hobbies) prevent you from obtaining an excellent rating or mark for effort in your high school work?"

Occasionally or fairly often	12%	39%	38%

Item 76: "Did most of your high school teachers probably think of you as one of their hardest workers even though not necessarily one of the brightest?"

No or Definitely not	32%	61%	69%

Item 81: "Do you think your fellow students in high school thought of you as a hard worker?"

Generally or Definitely not	12%	32%	46%

Item 78: "Compared with most of your classmates, how much would you say you studied during your senior year in high school?"

Studied less or much less	27%	46%	46%

Item 79: "How much time, on the average, did you spend doing homework outside class during your senior year in high school?"

Three or more hours a day	54%	50%	30%

Item 84: "Do you tend to give up or delay on uninteresting assignments?"

	Non-Users	Infrequent	Frequent
Occasionally or fairly often	50%	70%	69%

Item 88: "Did you regard yourself as a more consistent and harder worker in your classroom assignments than the typical student in your high school classes?"

Generally or definitely not	19%	36%	46%

Item 89: "How well do you feel you learned how to study in high school?"

I learned fairly or very well	88%	81%	53%

Item 75: "All things considered (not just your academic preparation), how satisfied were you with your secondary school?"

Somewhat or very dissatisfied	19%	8%	38%

Many of these attitudes and ways of responding persisted into the college years as is indicated by the following items from the College Student Questionnaire, Part 2. They reflect the students' thinking and situation at the end of the second year in college.

Item 56: "In general, are you enjoying your studies in college this term as much as you had expected to?"

No, I am definitely enjoying them less than I had expected	20%	4%	50%
No, but I am only mildly disappointed	12	25	8

Item 85: "In terms of your own personal satisfaction, how much importance do you attach to getting good grades?"

None or not much	8%	24%	36%

Item 70: "Have you had the feeling in the past year or so that some of your instructors have judged (e.g., graded) you more on the basis of extraneous or irrelevant factors than on the basis of the quality of your work?"

Quite often	-%	8%	23%

Item 78: "Compared with most of your classmates at this college, how much would you say you have studied during the present term?"

I have studied slightly less or much less than most of my classmates	28%	70%	39%

Item 92: "While studying are you easily distracted by other people working nearby, by conversation, by street noises, etc?"

	Non-Users	Infrequent	Frequent
Yes, easily distracted	16%	29%	42%

Item 82: "Do you ordinarily find writing papers a difficult task, or do you have relatively little difficulty in getting your ideas down on paper?"

I find writing papers a very difficult task	20%	21%	62%

In comparison with infrequent and non-users, students who reported using marijuana frequently placed less importance on course work and relatively more upon self-discovery as a source of personal satisfaction. As a result of their college experience they came to place a greater value upon social activities such as "bull sessions" with fellow students and close friendships with students. Non-users deemphasized academic matters and placed greater emphasis upon self-discovery.

Item 45: "In which one of the following areas (Sept. 1965) do you hope to; (May 1967) have you received your greatest personal satisfaction at college?"

Coursework and Individualized Study			
Sept. 1965	56%	52%	23%
May 1967	28	36	8
Social life; dating, parties, etc.			
Sept. 1965	8	7	8
May 1967	12	28	42
Self-discovery, self-insight; discovery of new interests, talents, etc.			
Sept. 1965	28	35	61
May 1967	52	32	50

The tendency for frequent users to place relatively less value upon intellectual achievements and more upon affective and social concerns is also reflected in the following.

Item 29: "As far as you personally are concerned, which one of the requirements below is the most important in any job or profession you would consider going into?"

Opportunity to use my special abilities and talents			
Sept. 1965	48%	19%	8%
May 1967	36	42	-
Freedom to be creative and original			
Sept. 1965	8	31	46
May 1967	8	17	36

	Non-Users	Infrequent	Frequent
Opportunity to work with people rather than with things			
Sept. 1965	4%	11%	8%
May 1967	24	21	9
Opportunity to be helpful to others and/or useful to society in general			
Sept. 1965	20	19	15
May 1967	12	4	18

Students who remained non-users and those who became users of marijuana in college were fairly well differentiated by the philosophy of higher education to which they subscribed at the time that they entered college. As a result of the experiences of the college years, the non-users that changed their orientation moved away from a "collegiate" philosophy to an "academic" or "non-conformist" philosophy. Users moved principally in the direction of the "non-conformist" philosophy, the infrequent users changing principally from a "collegiate" philosophy and the frequent users from a "vocational" one. These statements are based upon the following items from the C.S.Q., Parts 1 and 2.

On every college or university campus students hold a variety of attitudes about their own purposes and goals while at college. Such an attitude might be thought of as a personal philosophy of higher education. The following paragraphs are descriptive statements of four such "personal philosophies" which there is reason to believe are quite prevalent on American college campuses. As you read the four statements, attempt to determine how close each comes to *your own* philosophy of higher education.

PHILOSOPHY A: This philosophy emphasizes education essentially as preparation for an occupational future. Social or purely intellectual phases of campus life are relatively less important, although certainly not ignored. Concern with extracurricular activities and college traditions is relatively small. Persons holding this philosophy are usually quite committed to particular fields of study and are in college primarily to obtain training for careers in their chosen fields.

PHILOSOPHY B: This philosophy, while it does not ignore career preparation, assigns greatest importance to scholarly pursuit of knowledge and understanding wherever the pursuit may lead. This philosophy entails serious involvement in course work or independent study *beyond* the minimum required. Social life and organized extracurricular activities are relatively unimportant. Thus, while other aspects of college life are not to be forsaken, this philosophy attaches greatest importance to interest in ideas, pursuit of knowledge, and cultivation of the intellect.

PHILOSOPHY C: This philosophy holds that besides occupational training and/or scholarly endeavor an important part of college life exists outside the classroom, laboratory, and library. Extracurricular activities, living-group functions, athletics, social life, rewarding friendships, and loyalty to college traditions are important elements in one's college experience and necessary to the cultivation of the well-rounded person. Thus, while not excluding academic activities, this philosophy emphasizes the importance of the extracurricular side of college life.

PHILOSOPHY D: This is a philosophy held by the student who either consciously rejects commonly held value orientations in favor of his own, or who has not really decided what is to be valued and is in a sense searching for meaning in life. There is often deep involvement with ideas and art forms both in the classroom and in sources (often highly original and individualistic) in the wider society. There is little interest in business or professional careers; in fact, there may be a definite rejection of this kind of aspiration. Many facets of the college—organized extracurricular activities, athletics, traditions, the college administration—are ignored or viewed with disdain. In short, this philosophy may emphasize individualistic interests and styles, concern for personal identity, and often contempt for many aspects of organized society.

The following four questions ask you to rank these four statements according to *the accuracy with which each portrays your own point of view.* Be sure to assign a different rank to each "philosophy."

Percentage selecting philosophy as "Most accurate (i.e., of the four statements, this one is the best description of my point of view)."

	Non-Users	Infrequent	Frequent
Philosophy A: "Vocational"			
Sept. 1965	11%	15%	15%
May 1967	8	12	-
Philosophy B: "Academic"			
Sept. 1965	16	33	23
May 1967	32	29	25
Philosophy C: "Collegiate"			
Sept. 1965	68	41	39
May 1967	44	29	33
Philosophy D: "Non-conformist"			
Sept. 1965	4	11	23
May 1967	16	29	42

A greater percentage of the students who became frequent users of marijuana expressed indecision or uncertainty in response to a variety of questions of the College Student Questionnaire. Also the categories of response provided in the multiple-choice format did not fit their ideas, feelings, values and experiences as well as they did for infrequent and non-users.

Item 22: "After obtaining your bachelor's degree, do you expect to continue your education in a graduate or a professional school?"

Haven't thought enough about this matter to say	12%	8%	23%

Do you have a particular major field of study in mind?

No, not even tentatively	19%	16%	36%

Item 26: "Have you decided, even tentatively, what occupation or vocation you want to pursue after college?"

No, not even tentatively			
Sept. 1965	23%	23%	68%
May 1967	24	28	42

Item 27: "In thinking about your occupational future, do you feel that in the long run you will have a preference for:"

I have not given sufficient thought to the matter to say	15%	3%	23%

Item 61: "In general, how well do you feel the secondary school (or schools) which you attended did in preparing you to do college work?"

	Non-Users	Infrequent	Frequent
I don't know	19%	19%	31%

Item 138: "Do you feel that you now have an adequate religious faith or personal philosophy which serves as a guide for your personal conduct?"

Undecided, don't know	12%	17%	31%

Item 25: "Do you plan to work for a doctoral degree?"

No, for reasons other than those listed	18%	15%	33%

Item 28: "If you could have your own choice in the matter, in which kind of firm, organization, or situation would you prefer to work after you finish your schooling?"

Other firm or situation			
Sept. 1965	4%	19%	23%
May 1967	4	8	46

Item 46: "From the list below, which has been your biggest problem or source of worry at this college during the past year?"

Other problems not mentioned above	12%	12%	25%

Item 51: "What is your opinion about the necessity for organized extra-curricular activities on any college campus?"

No opinion	12%	20%	39%

A greater percentage of the frequent users express a need for acceptance, recognition and support in social and interpersonal relationships but do not experience satisfaction or closeness in their relationships with parents, faculty or the majority of their fellow students. Within their personal relationships they seek great freedom for the expression of their own needs and personal style.

Item 149: "Could you become so absorbed in some kind of activity that you would lose interest in your family?"

Some probability, quite or very possible	24%	30%	50%

Item 154: "Do you feel that in the last year or so you have been growing closer to your family or further away from it?"

	Non-Users	Infrequent	Frequent
Slightly or much further away	56%	42%	82%

Item 153: "Many parents take a great deal of interest in what their sons and daughters do. How important is it to you that you satisfy your parents' wishes?

Not very or moderately important	37%	48%	67%

Item 161: "As a description of yourself, how accurate is the following statement, "I am one in a group of close friends, and we do most things together"?"

Definitely inaccurate			
Sept. 1965	20%	15%	33%
May 1967	46	30	17

Item 163: "Would you say that you often seem to ignore the opinions of other students when trying to accomplish something that is important to you?"

Rarely or never ignore opinions of other students			
Sept. 1965	32%	60%	31%
May 1967	36	25	-

Item 165: "Do you generally consult with close friends while you are in the process of making some fairly important decision?"

Usually or almost always			
Sept. 1965	52%	53%	38%
May 1967	72	52	82

Item 167: "Before you do something, do you try to consider how your friends will react to it?"

Yes, I usually or always do			
Sept. 1965	56%	50%	30%
May 1967	40	13	27

Item 105: "Would you agree that there are too many students on this campus who are so wrapped up in their intellectual development that they are close to failures as social persons?"

Agree or strongly agree	29%	48%	46%

Item 116: "Generally speaking, how satisfied are you with the general level of appreciation of the fine arts which prevails among students on this campus?"

	Non-Users	Infrequent	Frequent
Somewhat or very dissatisfied	35%	29%	54%

Item 114: Speaking generally, how satisfied are you with the willingness of most students on this campus to associate with other students whose racial, ethnic, or social backgrounds are different from their own?"

Somewhat or very dissatisfied	16%	17%	39%

Item 113: "Would you agree that there are too many students on this campus who carry their nonconformity too far, e.g., the clothes, beard, speech patterns, etc.?"

Agree or strongly agree	54%	46%	17%

Item 106: "Would you agree that there are too many students on this campus who go too far with their extremist politics?"

Agree or strongly agree	28%	44%	-%

If you were to discover a student at this college cheating, what would be your probable reaction?

Behavior in conformity with the Wesleyan University Honor Code			
Sept. 1965	86%	80%	92%
May 1967	80	65	46

Item 66: "Of the instructors you have had this past year, about what proportion would you say came to know you by name?"

Almost all	64%	54%	85%

Item 69: "During the present term, would you say that you have a close, personal relationship with any of the faculty at this college?"

No, with none	40%	32%	67%

Item 74: "On the whole, how satisfied are you with the opportunity you have had in the past year to meet with your instructors privately about course work and your own progress?"

Quite or entirely satisfied	83%	52%	62%

Item 76: "At the present time are there any faculty members at this college to whom you feel particularly responsible and whom you believe feel particularly responsible for you?"

	Non-Users	Infrequent	Frequent
No, there aren't any	44%	38%	82%

Item 75: "To what extent would you say this college recognizes and is interested in you as an individual person?"

Very seldom am I aware of interest in me as an individual	25%	35%	62%

Item 50: "Do you agree or disagree that this college or university exercises too much authority over student life outside the classroom?"

Agree, or strongly agree	12%	38%	64%

Item 71: "To what extent would you say this institution is under pressure from outside sources to offer a kind of educational experience which is contrary to the kind of educational experience you are seeking?"

There are moderate or very strong pressures of which I disapprove	29%	38%	61%

If you had it to do over again, would you choose Wesleyan?

Definitely or Probably yes	64%	81%	39%
Uncertain	16	4	46
Probably or Definitely no	20	15	15

Results of Interest and Personality Inventories

Adjective Check List

Students who later became involved in the use of marijuana selected patterns of adjectives as self-descriptive that were significantly different from those selected by students who remained non-users during their three years at college

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Insert Table 4

On some scales of the A.C.L. the scores of the infrequent users approximated those of the non-users, on others they were similar to the frequent users. Table 4 presents the means and s andard deviations for the three groups derived from administrations of the Check List at the beginning of the freshman year and during the second semester of the junior year. The F-ratios for the following scales had probability values of .05 or less

Table 4

Mean Standard Scores and Standard Deviations for Scales of the Adjective Check List, Gough and Heilbrun Freshman and Junior Year Administrations Classified by Reported Use of Marijuana

Scales		Reported Use of Marijuana: Non-Users Mean	Non-Users S.D.	Occasional Mean	Occasional S.D.	Frequent Mean	Frequent S.D.	F Ratio[1]
1. Number checked	Fr.	51.7	11.7	49.0	10.1	46.1	5.7	1.58
	Jr.	51.4	10.6	54.4	13.9	49.0	10.0	1.02
2. Defensiveness	Fr.	52.3	7.0	51.9	6.6	43.5	7.4	9.07***
	Jr.	48.5	9.3	48.4	9.2	42.9	9.3	2.13
3. Favorable	Fr.	49.5	8.4	50.6	8.2	41.7	12.4	4.69*
	Jr.	46.7	11.1	49.8	10.2	39.3	13.5	4.04*
4. Unfavorable	Fr.	52.1	8.3	50.6	9.4	52.1	19.5	0.13
	Jr.	54.1	10.0	53.0	10.4	61.7	12.4	3.46*
5. Self-confidence	Fr.	50.4	9.4	47.7	12.0	44.5	10.3	1.51
	Jr.	49.0	9.6	48.1	12.1	41.9	11.4	2.21
6. Self-control	Fr.	48.7	9.0	47.3	9.8	38.9	10.4	5.41**
	Jr.	47.9	12.5	46.6	11.6	40.3	14.3	1.81
7. Lability	Fr.	49.0	10.0	59.4	10.8	57.3	11.1	6.87**
	Jr.	50.6	10.8	59.7	8.5	56.3	12.2	5.23**
8. Personal Adjust.	Fr.	48.0	10.0	48.6	9.7	40.0	10.3	4.10*
	Jr.	44.6	12.4	45.2	10.5	39.7	12.6	1.15
9. Achievement	Fr.	56.6	6.4	49.7	10.4	42.8	11.6	10.91***
	Jr.	53.0	11.9	47.7	11.4	40.9	12.0	5.30**
10. Dominance	Fr.	55.7	8.6	50.6	10.8	45.7	10.8	5.04**
	Jr.	52.1	11.1	48.4	11.5	41.8	13.4	3.72*
11. Endurance	Fr.	57.0	8.2	49.4	7.8	41.7	11.7	14.66***
	Jr.	52.3	15.6	45.9	9.5	41.5	10.9	3.93*
12. Order	Fr.	56.7	9.2	46.2	8.0	41.1	13.3	14.01***
	Jr.	52.0	14.1	46.0	8.6	41.2	15.0	3.86*
13. Intraception	Fr.	50.4	11.3	52.5	10.9	47.3	12.5	0.99
	Jr.	51.4	13.1	53.0	11.2	46.8	15.5	1.10
14. Nurturance	Fr.	46.6	11.9	51.8	11.3	44.9	13.7	1.90
	Jr.	45.4	11.2	48.3	12.5	41.6	15.1	1.33

15. Affiliation	Fr.	48.5	8.5	49.8	7.4	44.9	9.9	1.63
	Jr.	46.2	9.7	49.3	10.5	40.9	11.4	3.03
16. Heterosexuality	Fr.	46.4	11.4	51.2	14.7	49.5	11.6	0.95
	Jr.	47.1	10.6	51.8	12.5	48.5	11.5	1.12
17. Exhibition	Fr.	51.6	10.9	53.2	11.3	54.7	10.6	0.40
	Jr.	51.2	14.3	51.8	13.8	52.7	10.4	0.07
18. Autonomy	Fr.	53.9	9.9	53.5	13.5	56.9	11.6	0.42
	Jr.	54.5	12.3	54.4	8.6	55.9	15.4	0.09
19. Aggression	Fr.	52.7	11.2	49.0	11.6	55.3	12.0	1.55
	Jr.	53.5	11.2	50.4	12.0	55.7	12.2	1.02
20. Change	Fr.	49.6	11.3	55.6	10.7	55.0	8.4	2.49
	Jr.	46.8	12.8	55.5	10.3	49.5	9.0	4.10*
21. Succorance	Fr.	47.9	8.0	47.7	8.6	54.4	12.4	2.90
	Jr.	49.1	10.1	49.4	9.4	56.8	17.0	2.44
22. Abasement	Fr.	46.2	9.1	48.4	9.2	49.9	11.2	0.80
	Jr.	47.3	11.5	48.6	8.3	54.8	12.5	2.55
23. Deference	Fr.	45.4	9.0	45.5	12.4	42.2	11.5	0.52
	Jr.	46.3	11.5	45.4	9.5	46.5	14.9	0.06
24. Counseling Readiness	Fr.	49.0	9.9	48.9	10.2	50.3	9.8	0.10
	Jr.	50.4	8.5	51.7	11.1	54.9	9.1	1.03
N	Fr.	27		25		15		
	Jr.	28		25		15		

[1] For 2 and 66 d.f., F ratio of 3.15, P=.05(*); 4.98, P=.01(**); 7.76, P=.001(***)

(freshman administration): defensiveness, favorable adjectives checked, self-control, lability, personal adjustment, achievement, dominance, endurance, and order. The scales that had a probability value of .05 or less at the junior year were: favorable and unfavorable adjectives checked, lability, achievement, dominance, endurance, order, and change. The differentiation of the three groups was greater in September 1965 than it was in the spring of 1968. One of the largest changes was in the greater number of unfavorable adjectives selected by frequent users in the junior year administration.

Some of the most distinctive features of the personality of the non-users that are identified in their self descriptions are as follows: The non-users have an optimistic, positive attitude toward life. They are self-confident and self-accepting. Their favorable attitudes toward themselves and their trust in others makes natural their desire to do well and to impress others. They have confidence in the value and reward of hard work and conventional endeavor. In their determination to do well, they are capable of mobilizing, organizing and sustaining their attention and effort. Their self control is achieved by their strong dependence upon rational, intellectual processes and the suppression and denial of emotional impulses, especially chaotic, anti-social ones. They are inclined to sacrifice spontaneity and individuality in the interests of regularity and responsibility. Their conscientiousness, readiness to adapt, and responsiveness to others are characteristics that are valued by others and contribute to harmonious interpersonal relationships.

In contrast to the non-users, the students who became frequent users describe themselves as insecure in their personal identity, dissatisfied, and in conflict with people. They are anxious, apprehensive and pessimistic. They have less confidence in themselves and in their environment, and have a less basic and profound trust in the worth of effort and involvement. They have not learned to control their emotions so that they experience their behavior and mood state as erratic and unpredictable. They are restless, volatile, and find routine and consistency distasteful. They are impatient with deliberation and delay, and avoid choice situations and decision making. They are self-centered in their preoccupations, valuing their inner life above their external relationships. In contrast to the control of the non-users, the frequent users are sensitive and responsive to affect. Rather than inhibiting their emotional reactions in the interest of control and integration, their style is that of impulsive response in the interest of pleasure seeking, immediate gratification, and individual expression.

The infrequent users more commonly represent a synthesis of these opposing motivations and styles. Their self-regard is high and they are optimistically self-confident. They relate to others in productive and satisfying ways. They are able to experi nce their emotions without having to deny or suppress them on the one hand, but do not become overwhelmed or disorganized by them. Instead of valuing stability, they

seek opportunities for change and new experience. They are spontaneous, insightful and appreciative of newness and variety, confident of their ability to cope with it. Because their effect upon others is stimulating rather than abrasive or threatening, they experience their social relationships as satisfying and fulfilling and perceive themselves as valued and accepted.

An examination of adjectives that differentiated the three groups of students will illustrate and document these themes. The analysis presented here is based upon the words selected in the junior year administration. The answer sheets from the freshman year were not available for analysis.

Non-users describe themselves as being capable of mobilizing and sustaining energy and attention in the pursuit of their purposes and goals while frequent users chose these words least often.

	Non-User	Infrequent	Frequent
active	90%	71%	56%
ambitious	79	50	50
efficient	59	42	25
energetic	62	63	31
industrious	59	38	19
initiative	41	33	13
persevering	52	46	25

Words with obverse meanings, when available in the list, generally were selected as self-descriptive by a small percentage of all students although a smaller percentage of non-users selected these words.

apathetic	24%	38%	31%
easy-going	62	71	75
lazy	21	42	56
leisurely	35	50	44
quitting	10	8	19
unambitious	14	21	13

Non-users selected words that imply the organization and control of behavior in terms of objective standards of reality. They value cognitive processes and emphasize intellectual control. Infrequent users chose these words less often. The rate of selection by the frequent users was about one-half that of the non-users.

conservative	52%	25%	25%
methodical	45	25	19
organized	66	46	31
practical	72	54	37
rational	76	63	50
realistic	76	63	38

Several words in the list that have an opposite meaning show this same relationship but not with as great differentiation of groups.

	Non-Users	Infrequent	Frequent
disorderly	14%	25%	38%
dreamy	21	46	44
emotional	45	67	63
forgetful	28	58	50
slipshod	7	8	25
unrealistic	21	21	31

Non-users and infrequent users perceive themselves as controlling their conduct in terms of social obligations and expectations to a greater extent than do the frequent users.

conscientious	79%	75%	48%
dependable	83	88	50
mannerly	55	46	19
reliable	69	71	44
responsible	76	75	50

The anonyms of these words, when available in the Check List, were rarely selected. For each, however, the percentage of selection was greatest for frequent users.

undependable	7%	-%	19%
rude	3	17	19
irresponsible	10	21	44

Frequent users selected adjectives indicative of lability of emotional reactions and relatively poor affect control. Non-users chose most of these words with a frequency that was less than half that of frequent users.

impatient	48%	58%	75%
impulsive	31	58	50
mischievous	21	21	50
moody	31	50	75
nervous	28	46	69
rebellious	24	38	56
restless	17	50	44
temperamental	31	29	56

Words implying emotional control or less extreme fluctuation of mood did not differentiate the groups as sharply, although the frequent users selected these words less often.

calm	59%	63%	31%
deliberate	52	38	31
patient	45	58	31
relaxed	28	54	25
self-controlled	45	79	38
stable	55	50	38
steady	55	46	31

Frequent users of marijuana describe themselves in terms that indicate a lack of confidence in their ability to control and direct their psychological states and a lack of trust in their social relationships.

	Non-Users	Infrequent	Frequent
absent-minded	14%	38%	50%
confused	17	42	69
pre-occupied	19	37	56
self-centered	45	38	63
foolish	7	13	38
immature	10	33	38
weak	6	8	31
anxious	38	54	56
cowardly	7	4	38
deceitful	10	8	25
evasive	10	17	38
fearful	7	4	31
pessimistic	28	17	44
resentful	14	17	38
shy	21	33	56
withdrawn	31	25	50
worrying	35	50	50

Of the three groups, the infrequent users of marijuana express most consistently an attitude of confidence in themselves and in their personal and societal relationships. They are accepting and responsive whereas the frequent users are more dominated by impulse and the non-users rely heavily upon intellectual and societal controls. The quality of these adjectives which most characterize the infrequent users is humanistic. They imply a larger degree of personal freedom and self-acceptance.

confident	62%	71%	38%
optimistic	55	79	44
trusting	52	67	38
adventurous	55	79	50
independent	72	88	44
individualistic	59	75	38
insightful	41	67	56
resourceful	52	67	31
fair-minded	72	83	44
forgiving	69	92	69
kind	69	83	50
natural	69	71	44
peaceable	55	63	31
relaxed	28	54	25
sympathetic	59	71	44
tolerant	59	75	44

	Non-Users	Infrequent	Frequent
adaptable	79%	92%	63%
spontaneous	35	67	69
versatile	59	67	31

California Psychological Inventory

Three scales of the California Psychological Inventory differentiated the three groups of students at a level greater than chance (Table 5), namely: Socialization, Achievement via Conformity and Flexibility. A fourth scale, Social Presence, had a value slightly less than the 5% point. A profile analysis of the C.P.I. for the three experimental groups is consistent with the observations based upon the Adjective Check List. The non-users again appear as organized, efficient, and industrious; valuing intellectual activity and achievement and being deferential to authority, custom and tradition. The infrequent users are adventurous, enthusiastic, and spontaneous. Their concern for personal pleasure and their confident assertions of competence and self-control are balanced by an adequate degree of social maturity and responsiveness. The rebellious, self-assertiveness of the frequent users, although containing elements of imaginativeness and insightfulness, is more personally disorganizing and socially counter-productive because its underlying motivations are more strongly narcissistic in character. The frequent user's preoccupation with his feelings and needs and his lack of confidence in himself and his environment interfere with the establishment of a satisfying sense of personal integration and integrity or of social relatedness.

Myers-Briggs Type Indicator

In their responses to items of the Myers-Briggs Type Indicator, non-users expressed a preference for relying primarily upon the process of sensing and for using a judging process, rather than a perceptive one, in dealing with the outer world. The difference between groups exceeds chance probabilities for the mean scores on the Sensing, Judgment and Perception scales (Table 6). These differences between groups are also revealed in the percentage of students selecting each of four basic preferences. In respect to Extraversion-Intraversion, the differences are slight. About equal percentages of non-users prefer sensing and intuition whereas the great majority of users prefer intuition over sensing. The differences in preference for thinking and feeling are relatively small. Non-users prefer Judgment over Perception at a rate of almost two to one. This relationship is reversed in the case of infrequent users and for frequent users the preference of Perception over Judgment is in excess of nine to one.

These differences suggest and reiterate contrasts between users and non-users that were observed in the responses to the other questionnaires and inventories. The non-users to a greater degree recognize and accept standards in terms of which they organize and direct their behavior. The users approach life with fewer "givens". They have a greater openness to experience, assume an attitude of suspended judgment and value experience

Table 5

Mean Raw Scores and Standard Deviations for Scales of the California Psychological Inventory Classified by Reported Use of Marijuana

Scale	Non-Users Mean	Non-Users S.D.	Occasional Mean	Occasional S.D.	Frequent Mean	Frequent S.D.	F Ratio[1]
Dominance	30.6	6.2	29.3	6.2	27.4	8.0	1.20
Capacity for Status	21.6	3.4	22.4	3.0	20.6	4.1	1.26
Sociability	35.4	4.5	26.4	5.4	24.2	4.8	0.96
Social Presence	35.1	6.8	39.3	5.5	36.8	6.1	3.01
Self-Acceptance	23.2	3.7	23.0	3.3	23.3	3.2	0.04
Sense of Well-Being	35.5	4.3	35.6	4.0	33.1	4.2	2.23
Responsibility	31.4	3.8	31.2	4.9	28.9	4.9	1.72
Socialization	39.4	4.3	36.1	6.3	33.5	6.0	6.22**
Self-Control	29.3	7.5	27.5	7.1	24.2	7.6	2.42
Tolerance	22.6	4.3	24.2	4.0	20.9	5.1	2.95
Good Impression	19.2	4.9	18.2	5.4	16.6	7.0	1.10
Communality	25.3	2.5	24.5	3.0	24.1	2.3	1.08
Achievement via Conformity	28.1	3.3	26.6	4.9	24.7	4.7	3.28*
Achievement via Independence	21.0	3.4	22.3	3.6	22.0	4.1	0.89
Intellectual Efficiency	39.8	4.0	39.8	5.7	38.0	5.5	0.76
Psychological-Mindedness	11.9	2.6	13.2	3.3	11.8	2.9	1.86
Flexibility	10.4	3.5	13.1	3.2	13.9	3.5	6.82**
Femininity	18.3	3.5	17.2	4.0	17.3	2.7	0.78
N	28		25		16		

[1] For 2 and 66 d.f., F ratio of 3.15, P=.05(*); 4.98, P=.01(**); 7.76, P=.001(***)

Table 6

Mean Raw Scores and Standard Deviations for the Scales of the
Myers-Briggs Type Indicator
Classified by Reported Use of Marijuana

	Non-Users		Occasional		Frequent		
Scales	Mean	S.D.	Mean	S.D.	Mean	S.D.	F ratio
Extraversion	12.8	6.1	13.6	6.9	11.2	6.5	0.64
Intraversion	12.5	6.0	11.1	6.4	12.7	7.0	0.44
Sensing	10.3	8.0	5.3	5.2	5.3	5.3	4.63**
Intuition	13.7	6.7	17.4	4.9	15.8	6.0	2.50
Thinking	10.5	4.8	9.6	5.2	8.6	5.9	0.72
Feeling	9.5	4.5	10.2	6.3	12.8	7.8	1.61
Judgment	16.0	7.8	9.8	5.6	7.6	3.5	11.33***
Perception	11.0	7.7	16.2	6.4	18.9	4.4	8.33***
N	29		25		16		

Percentage of Students Selecting Each of Four Basic Preferences

	Non-Users	Infrequent	Frequent
Extraversion	48%	56%	44%
Intraversion	52	44	56
Sensing	45	12	25
Intuition	55	88	75
Thinking	55	60	44
Feeling	45	40	56
Judgment	62	36	6
Perception	38	64	94
N	29	25	16

EI Whether to direct perception and judgment upon environment or world of ideas.
SN Which of these two kinds of perception to rely on.
TF Which of these two kinds of judgment to rely on.
JP Whether to use judging or perceptive attitude for dealing with environment.

from Myers, Isabel Briggs The Myers-Briggs Type Indicator
Educational Testing Service, Princeton, N.J. 1962

directly in terms of their own feelings rather than by some external criterion or predetermined standard of excellence or rectitude.

An excerpt from the description of types provided in the Myers-Briggs Type Indicator Manual 1962, page A-4, for type INFP, which is the single type that includes the largest number of frequent users, strikes a theme which was developed above: "This type's special problem is that he may feel so marked a contrast between inner ideal and outer reality (including his objective view of himself) as to burden him with a sense of inadequacy . . . . If his ideals find no channel of expression, they make him too sensitive and vulnerable, with dwindling confidence in life and in himself."

The description of the ISTJ type which includes no users and the largest number of users of any single type combination is consistent with other self report information. "He is the most thorough of all the types, painstaking, systematic, hard-working and patient with detail and routine. He does not enter into things impulsively, but once in, he is very hard to distract, discourage or stop."

The Strong Vocational Interest Inventory

The mean scale values for the three groups differ by amounts that are greater than chance in the case of five occupational scales: psychologist, psychiatrist, musician, accountant, and office worker, one group scale (Group VIII), and one non-occupational scale, Occupational Level (Table 7). Although the remaining differences lack statistical significance, on all scales of groups I, II, IV, V and VI, with the exceptions of scales: veterinarian, policeman, army officer, social science teacher, business education teacher and school superintendent, the mean scale value is higher for users than for non-users. In groups VIII, IX and XI, with only Senior CPA excepted, the mean score for non-users exceeds that of users on all scales.

The scales on which non-chance differences are observed and the general trends noted, suggest the possibility that non-users are more strongly inclined to practical, applied, organizational and economic interests while users more frequently prefer theoretical, cultural, person-oriented interests. The non-users show a preference for situations characterized by relationships of authority while the users prefer activities that offer more opportunities for individualism and personal style. Non-users express attitudes and preferences more similar to those of high level administrators and professionals than do frequent users although a larger percentage of the parents of frequent users are high level executives or professional people.

Table 7

Means and Standard Deviations for scales of the
Strong Vocational Interest Blank
Classified by Reported Use of Marijuana

	Reported Use of Marijuana						
	Non-Users		Occasional		Frequent		
Scale	Mean	S.D.	Mean	S.D.	Mean	S.D.	F Ratio[1]
1. Artist	29.3	9.2	36.3	12.6	35.6	13.5	2.787
2. Psychologist	33.3	11.6	40.7	13.8	42.6	13.1	3.410*
3. Architect	27.51	10.2	35.0	13.0	32.4	15.3	2.398
4. Physician	31.6	13.5	39.5	14.2	40.4	14.8	2.860
5. Psychiatrist	33.0	9.7	39.5	12.4	41.4	11.2	3.643*
6. Osteopath	27.6	10.6	30.2	10.9	31.3	9.8	.696
7. Dentist	23.4	12.0	27.1	11.7	26.1	13.4	.652
8. Veterinarian	13.7	9.1	14.8	11.2	12.9	7.3	.203
9. Mathematician	24.5	13.4	28.7	13.0	30.0	12.1	1.113
10. Physicist	18.4	15.0	23.6	14.7	24.5	14.6	1.183
11. Chemist	27.3	16.0	33.8	14.4	34.3	14.2	1.637
12. Engineer	26.4	14.0	29.2	12.1	27.0	12.0	.331
13. Production Manager	28.5	8.0	27.8	8.7	25.6	8.1	.611
14. Farmer	25.1	10.0	30.4	11.0	27.4	10.3	1.691
15. Carpenter	11.9	9.5	16.1	12.0	13.9	8.5	1.116
16. Forest Service Man	15.5	8.7	20.4	11.6	16.3	9.6	1.712
17. Aviator	27.6	12.4	32.3	11.8	32.6	12.1	1.311
18. Printer	31.9	8.3	36.2	10.7	37.4	7.1	2.388
19. Math. Sci. Teacher	28.4	12.0	31.4	13.2	32.3	9.2	.664
20. Industrial Arts Teacher	9.1	9.1	12.7	11.7	9.8	8.6	.929
21. Voc. Agricult. Teacher	13.3	6.9	17.8	11.5	16.3	8.9	1.627
22. Policeman	23.4	6.3	23.4	9.6	24.6	5.1	.142
23. Army Officer	25.9	11.2	26.2	13.4	24.3	8.7	.153
24. YMCA Physical Director	25.7	9.3	27.7	13.8	27.8	9.8	.248
25. Personnel Manager	33.0	10.7	33.2	13.3	33.6	12.7	.014
26. Public Administrator	38.4	9.1	39.0	11.1	39.4	9.8	.057
27. Vocational Counselor	34.9	10.2	35.3	10.7	37.9	12.9	.402
28. Physical Therapist	31.0	9.4	35.2	13.7	35.8	9.8	1.311
29. Social Worker	34.5	11.2	38.0	12.8	40.4	14.3	1.194
30. Social Sci. Teacher	33.7	10.7	33.3	12.2	36.7	13.0	.445
31. Bus. Educ. Teacher	29.0	9.5	28.3	11.4	31.3	12.9	.361
32. School Superintendent	28.9	11.6	28.7	12.7	29.7	13.5	.035
33. Minister	24.3	10.9	29.4	13.3	29.6	15.0	1.314
34. Musician	36.7	10.4	45.8	14.1	48.3	15.1	5.001**
35. Music Teacher	31.3	10.9	36.1	14.0	38.5	15.5	1.713
36. C.P.A. Owner	36.9	7.1	32.1	10.5	33.6	8.7	2.061
37. Senior C.P.A.	34.2	9.7	33.6	8.6	35.2	7.6	.155
38. Accountant	27.1	8.9	21.3	7.3	22.6	9.4	3.280*
39. Office Worker	31.2	6.7	25.4	8.9	26.7	9.3	3.482*
40. Credit Manager	34.8	9.7	31.8	11.8	33.2	12.8	.473
41. Purchasing Agent	26.4	9.2	20.3	11.7	20.6	12.3	2.447
42. Banker	26.0	9.0	21.0	8.8	22.1	8.6	2.354

Table 7 (continued)

43. Pharmacist	28.5	7.0	27.3	9.8	26.8	6.7	.263
44. Mortician	26.0	9.0	21.4	9.0	21.8	9.1	1.991
45. Sales Manager	34.0	9.8	29.9	10.5	29.3	10.5	1.455
46. Real Estate Salesman	39.1	9.2	36.1	8.9	35.9	7.0	1.051
47. Life Ins. Salesman	35.6	11.3	30.4	10.3	31.4	10.2	1.755
48. Advertising Man	40.9	9.3	42.1	10.2	41.3	7.4	.110
49. Lawyer	42.6	8.2	41.3	11.6	42.9	5.1	.189
50. Author-Journalist	38.5	7.7	40.8	10.7	41.5	8.5	.700
51. Pres. Mfg. Concern	32.1	9.4	30.5	9.4	28.6	8.0	.775
52. Group I	39.9	9.9	46.2	11.6	45.9	13.5	2.428
53. Group II	31.5	14.9	35.7	12.6	34.7	11.8	.709
54. Group V	41.0	8.7	41.7	11.3	43.1	11.8	.188
55. Group VIII	30.0	9.4	23.0	10.6	23.2	11.6	3.725*
56. Group IX	40.2	10.6	36.2	9.6	36.6	9.9	1.216
57. Specialization Level	46.0	9.0	48.3	9.3	48.3	9.4	.535
58. Interest Maturity	52.8	5.4	51.9	6.8	51.8	7.6	.170
59. Occupational Level	60.3	4.8	57.0	7.5	55.6	4.7	3.770*
60. Masculinity-Femininity	41.2	9.7	40.6	9.8	40.3	9.9	.056
N=	28		25		16		

[1] For 2 and 66 d.f., F ratio of 3.15, P=.05(*); 4.98, P=.01(**); 7.76, P=.001(***)

Measures of Scholastic Aptitude and Achievement

On each of the aptitude and achievement tests listed in table 8, users had a higher mean score than did non-users, although none of these differences was of a magnitude required for statistical significance. Except for the Davis Reading Test, frequent users achieved a higher mean score than did infrequent users. These relationships were reversed in the case of the Survey of Study Habits and Attitudes. It was noted above that frequent users reported that they were less concerned about academic achievement and that they devoted less time and effort to the preparation of their course work. Although the frequent users gave test evidence of being at least as capable intellectually, their high school and early college record is one of relative under-achievement in comparison to the other groups.

"During your secondary years did you receive any honors or awards for scholarly achievement?"

	Non-Users	Infrequent	Frequent
No	20%	12%	31%

Academic Average, Freshman Year, from official college records.

90.0 and above	-%	4%	-%
86.7 - 89.9	12	15	8
83.4 - 86.6	28	11	15
Total with Honors Average	40	30	23

Academic Average, Sophomore Year, from official college records.

90.0 and above	17%	12%	-%
86.7 - 89.9	-	8	-
83.4 - 86.6	13	13	29
Total with Honors Average	30	33	29

On the College Student Questionnaire, Part 1, a larger percentage of non-users described their reading rate as fairly or very slow. This was confirmed by the speed of comprehension scores of the Davis Reading Test. Similarly, a greater percentage of non-users felt that they had learned how to study in high school. Their mean score on the Survey of Study Habits and Attitudes exceeded that of the frequent users by almost five raw score points. After two years in college the mean "Study Habits" score derived from C.S.Q., Part 2, was higher for non-users (26.3) than for users (23.7).

"In reading text books (e.g., in history), how would you describe your reading rate?"

Fairly or very slow	66%	38%	38%

Table 8

Mean Scores and Standard Deviations for
Aptitude and Achievement Tests
Classified by Reported Use of Marijuana

	Non-Users		Occasional		Frequent		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	F ratio[1]
SAT Verbal	623.4	81.1	654.4	70.5	659.4	58.5	1.76
SAT Math	671.0	59.5	677.6	71.8	680.0	78.9	0.11
Davis Reading Test							
Level of Comprehension	26.9	5.7	29.3	6.0	26.9	5.6	1.36
Speed of Comprehension	45.7	12.1	50.0	12.7	49.4	10.1	1.00
Concept Mastery Test	83.1	26.5	94.7	25.7	97.6	27.2	2.05
G-Z General Reasoning Test	16.7	4.5	17.8	4.6	18.4	4.1	0.85
Ship Destination Test	38.0	6.8	38.0	6.8	38.6	6.7	0.05
Survey of Study Habits and Attitudes, Form C	45.6	9.0	42.4	9.5	40.8	13.6	1.26

[1] The differences in the mean scores of the three groups are of magnitudes that can be attributed to chance. For 2 and 66 d.f., F ratio of 3.15, P=.05

"How well do you feel you learned to study in high school?"

	Non-Users	Infrequent	Frequent
I learned fairly or very well	88%	81%	53%

Members of the faculty were asked to select from a roster of students that had been in their classes, those individuals that they regarded as the "best" and the "poorest" students. For those students included in this study, their nominations were as follows:

Nominated as "Best" student by one or more faculty	48%	38%	31%
Nominated as "Poorest" student by one or more faculty	12	15	23
Nominated as "Best" student by at least one faculty member and as "Poorest" by at least one faculty member	20	4	15
Not nominated	20	42	31

Discussion

This study demonstrated that there were variables in the "pre-use" record of college students that were predictive of the extent to which they used marijuana. Many of the characteristics of "users" and "non-users" reported in this study have been reported by other investigators. However, their findings have been based upon clinical observations and/or psychological testing of persons who had used or currently were using marijuana. This report presents data that was collected before the subjects (except for three) had any extensive personal exposure to marijuana. Groups of students, classified by their use or non-use of marijuana, were differentiated by personality characteristics, attitudes, self-reported behaviors and social background variables that were recorded prior to their use of the substance.

On the basis of the available evidence, some writers have inferred that the prolonged and heavy use of marijuana has the psychological effect of reactivating orality or inducing regression to the oral stage of development. The evidence of this study suggests that, as a group, college students who persisted in the frequent use of marijuana presented a personality configuration containing many components of orality before they began to use the substance. Their personal characteristics were predisposing to, rather than modified by, the use of marijuana.

The use of marijuana has very different significance in the psychological economy of different individuals. Sub-groups of society place different values upon it and interpret behaviors associated with its use in a variety of

ways. As with other behaviors, an individual's use of marijuana may be conceived as a resultant of the interaction of his needs, attitudes and expectations, with the models, values and incentive systems provided by the social persons and institutions that are influential in his life.

Students who abstained had learned to delay gratification and to control their impulses in the interest of achieving socially approved goals. Sublimation and repression were prominent techniques in their handling of primary impulses. They had strong, positive identifications with persons and institutions that defined the use of marijuana as dangerous, status reducing, socially destructive and illegal. Important social agents approved and rewarded their abstinence.

Social disapproval was not an effective deterrent for frequent users since they had developed an estrangement from the "straight society". They had a history of conflict with authority figures and were antagonistic to a society that they interpreted as repressive and dehumanizing. They had developed fewer controls and were freer in their expressions of impulse. They found more congenial a sub-culture in which the use of marijuana was instrumental to social acceptance, status enhancement and psychological fulfillment. Smoking pot was rationalized within an ideology and was a significant component of a life style that was more congruent with their psychological condition than was the conforming behavior of the non-smokers.

To an extent greater than was true of the other groups, the frequent users had learned to satisfy basic needs and had experienced pleasure from the ingestion of chemicals. They had acquired attitudes and skills that disposed them to easier acceptance and more effective use of new and different substances. As heavy smokers of cigarettes, they had learned to inhale and were more likely to have developed the techniques and supporting attitudes that permitted them to have a strong and favorable reaction to their early experiences with marijuana. Less experienced smokers, who were more ambivalent in their expectations, and who had fewer active needs that could be directly satisfied through the use of marijuana, were less likely to experience their reaction to the drug as pleasant, were less likely to repeat the experience and were less likely to generalize and extend the experience through the use of other psychoactive substances.

The appeal of ingesting a substance that is reputed to provide more penetrating insights, greater aesthetic sensitivity and enriched social relationships is great indeed to a person who repeatedly has experienced a disparity between his aspirations and his accomplishments, even though these accomplishments may be substantial. He has learned to attribute his failure to personal incompetence and inadequacy. With little confidence in his own powers and a lack of trust in persons and social institutions, he is more disposed to value and accept an impersonal agent that produces results that are experienced immediately and directly. By contrast, the appeal of marijuana will be less intense and persistent for individuals who

have a confident self-regard and are optimistic about their future and that of the society in which they live.

The possibility of being able to control one's mood state by the use of drugs is more attractive to a person who is persistently anxious, tense, and depressed than it is to a person who experiences his emotions as appropriate, agreeable and within his control. The use of marijuana and other psychoactive substances offer relief from self-doubt, indecision, anxiousness, and a sense of isolation and unrelatedness without imposing heavy demands for competence, effort or the ability to tolerate delay. Against these positive attractions, the more common deterrents carry little force in the psychological economy of some individuals. Developing psychological dependence on a drug is not much of a threat to a person who has failed to achieve his independence and a firmly based self-regard. Possible adverse effects do not seem very important to a person who is dissatisfied with his life and pessimistic about his future. The person who is in conflict with or detachment from his family, school, church and society is less responsive to their proscriptions or advice and may welcome an effective means for expressing opposition and defiance.

Persons who have experienced difficulties in establishing satisfying social relationships, will have powerful incentives to engage in behaviors that assure acceptance into a group and that provide a basis for continuing social interaction. Many kinds of behavior have been used as a basis for initiation into group membership and as the fo s for continuing social interaction (e.g., athletic, artistic, social, sexual). The use of marijuana provides the attraction of a distinctive, pleasurable shared experience. Its use involves a shared risk that may become the basis for interdependence and mutual defense and offers the comraderie of defiance of parental wishes, institutional rules, and/or social sanctions.

Some men have experienced their parents and especially their fathers as authoritarian, or unassailably powerful, or remotely indifferent to and unaware of their son's true feelings and needs. In the past, academic failure or selective academic failure in fields critical to the parents' expectations and desires, have been potent weapons of retaliation and emancipation. However in the time of an unpopular war, this type of aggression carries with it the unacceptable hazard of exposure to the draft and the loss of social experiences that are hard to replace outside of the college community. On the other hand, involvement in the "counter-culture" provides a powerful and ready-made vehicle for expressing one's sense of alienation from and rejection of parental values and controls. The use of drugs is a powerful form of aggression against the parents because of the anxiety-evoking value that it has for many middle-class adults. Through his use of marijuana the student may be able to extract expressions of concern from a parent that he has experienced as indifferent or strike back at one that has been overcontrolling and emasculating.

In contrast to the abstainers and the frequent users, the appearance of marijuana on the college campus provided the opportunity for a new dimension of experience to the self-assured, adventuresome, curious young men who were eager for new experiences and new tests of their manhood and maturity. To them it became one more item in their repertoire of tools, techniques and accomplishments that could be used with discretion and control in the expanding mastery of self and their growing awareness of and sensitivity to the environment. Because their interests and energies already were heavily invested, the experience of marijuana was not likely to have a profound effect. Their openness to experience and their sense of personal freedom permitted them to participate in a behavior that was officially disapproved and which involved an element of risk taking. However their self-esteem, their commitment to striving for objectively based accomplishments, and their degree of social involvement served as controls against an intense preoccupation with drug-induced experiences.

The use or non-use of marijuana is not an isolated or adventitious event in the life of an individual but rather is to be understood as behavior that is incompatible with or congruent with an operating life style. Efforts to influence or modify this particular behavior must take account of the complex of variables to which it is related. The same behavior may be motivated by widely different need structures and may have very different significance for different individuals.

The use of marijuana became an issue of matter-of-fact choice for the present sample of college men as a result (1) of its physical availability on campus, (2) the operation of a protective sub-culture that greatly reduced the hazards of exposure and punitive action, (3) the presence in the immediate environment of social models that used marijuana and of social groups that facilitated its use, and (4) the activities in the larger society of a drug sub-culture that aggressively propagandized a life-style in which the use of psychoactive substances was a significant and highly publicized component.

The significance of marijuana use by other age groups, by members of other socio-economic classes, and by members of other societies is almost certain to differ from that revealed in this study. The social and psychological characteristics associated with the use of marijuana observed in this study are relative to a particular constellation of social attitudes, practices and structures. The personal significance of its use would be altered if profound and widespread moral-religious sanctions developed against the use of marijuana and other psychoactive substances, or if marijuana were demonstrated to be relatively harmless and its use were legalized. Under either of these conditions, the associated social and psychological variables would change radically. Even in the more moderate changes which have occurred in social attitudes and practice during the past two years, it is likely that some changes have occurred in the personal characteristics associated with use or non-use of marijuana by college men.

Summary

1. A random sample of 70 cases was drawn from the junior class of a small, selective New England men's college of the liberal arts. Participants in the study completed an anonymous questionnaire providing background information and a number of statements concerning the student's use of marijuana and other psychoactive substances. A number of tests and inventories that had been administered to these individuals three years earlier also were included in the analysis.

2. Forty-one percent of the sample reported that they had never used marijuana (referred to in the report as "non-users"). Thirty-six percent indicated that they had used it once a month or less (called "infrequent users"), and twenty-three percent said that during the 1967-68 academic term they had smoked marijuana at least once a week ("frequent users").

3. Most students began their use of marijuana during their college years. Students who had not used marijuana reported that they had not used other hallucinogenic drugs. Frequent users of marijuana used a greater variety of hallucinogenic drugs and used them more frequently than did infrequent users of marijuana.

4. There were no statistically significant differences in the mean scores of the three groups on a number of aptitude tests. However, on all of the aptitude and achievement tests that had been administered, the mean scores of users consistently were higher than those of non-users.

5. At a time before most of the users had any direct experience with marijuana, students who remained non-users and those who later used it were differentiated by certain attitudes and personality characteristics tapped by the College Student Questionnaire, the Adjective Check List, the California Psychological Inventory and the Myers-Briggs Type Indicator. The following statements, although gross over-simplifications, suggest the character of differences observed between non-users and users of marijuana. They are expressions of group trends, not descriptions of individuals.

   a. Users make earlier and more extensive use of alcohol and tobacco than did non-users.

   b. The parents of users are more highly educated, more affluent, and more frequently engaged in managerial or professional occupations. A greater percentage of users report the parent-child relationship in their homes as authoritarian.

   c. Users are more individualistic and less frequently associated with organizations and institutions. They express greater distrust and less acceptance of conventional ways of doing, attitudes and values.

d. Users express uncertainty, dissatisfaction and disaffection more frequently and in a broader range of their experiences than did non-users.

e. Users are open to new experience and actively seek and value the novel and unconventional. They place less importance upon the past and the future. This emphasis upon immediate experience favors emotional sensitivity and responsiveness over planfulness and commitment and contributes to a sense of personal instability and lack of control.

f. Although their performance on tests of scholastic aptitude equal or exceeds that of non-users, users do not invest as much effort and interest into their academic work and do not receive recognition for outstanding academic performance to the extent that non-users do.

6. Information derived from (1) the College Student Questionnaire, Part 2, at the end of two years in college, and (2) from the Adjective Check List after three years in college, suggests that users and non-users become more similar in some of their attitudes and in their self-concepts.

7. The distinctive characteristics of users found in this study are rather similar to those that have been reported by other investigators that have worked with college populations.

8. The psychological significance of use or non-use of a substance such as marijuana is almost certainly related to the meaning and values that are attributed to that behavior by the society-at-large and especially by the "significant others" of a given individual. This study should be replicated to determine the degree to which the findings reported here are time-specific and determined by the prevailing attitudes toward the use of marijuana or other psychoactive substances.

Appendix

WESLEYAN UNIVERSITY STUDENT QUESTIONNAIRE

Most of the following are factual questions that can be answered quickly, total time required approximately five minutes. Please indicate your answers by placing an "X" before the appropriate alternatives.

Please report as accurately and as completely as possible. To be of value, it is essential that this study be based upon accurate information. There are no identifying marks on this questionnaire. The survey will be conducted so that it will be impossible to identify the records of individuals who participate. Thank you for your cooperation.

1. Where are you living this term?

A	B	C	
1%	7%	13%	1. Fraternity
8%	85%	81%	2. Dormitory
4%	-	-	3. Other University controlled housing
7%	7%	6%	4. Off-campus, non-University housing
-	-	-	5. Other

2. What was your academic average for the freshman year?

A	B	C			A	B	C
8%	4%	13%	1. Group I, 90.0 or above	4. 80.0 - 83.2	32%	15%	38%
2%	19%	6%	2. Group II, 86.7 - 89.9	5. 73.3 - 79.9	28%	42%	25%
0%	12%	13%	3. Group III, 83.3 - 86.6	6. 73.2 or below	-	8%	5%

3. What was your academic average for the first semester, 1967-68?

4%	17%	7%	1. Group I, 90.0 or above	4. 80.0 - 83.2	50%	42%	21%
3%	4%	36%	2. Group II, 86.7 - 89.9	5. 73.3 - 79.9	-	13%	14%
9%	21%	21%	3. Group III, 83.3 - 86.6	6. 73.2 or below	4%	4%	-

4. What is your present field of concentration?

5%	19%	31%	1. Language and Literature
-	3	-	2. Performing Arts
0	33	13	3. The Social Sciences
7	4	6	4. Philosophy or Religion
9	11	-	5. Psychology, Anthropology
1	4	6	6. Mathematics, Physical and Biological Sciences
7	11	19	7. College Plans
1	15	25	8. Interdepartmental, Interdivisional or other

A--Non-Users of Marijuana
B--Infrequent Users
C--Frequent Users

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5. What was your intended major at the time that you entered college?

11%	15%	-%	1. Language and Literature	
-	4	-	2. Performing Arts	
44	19	13	3. The Social Sciences	
-	-	-	4. Philosophy or Religion	
4	3	-	5. Psychology, Anthropology	
			6. Mathematics, Physical and Biological Sciences	26% 30% 25%
			7. College Plans	7% 3% 6%
			8. Undecided	7% 26% 56%

6. Why did you change your plans for majoring? Check as many as apply.

33%	33%	12%	0. Did not change plans for college major
26	41	37	1. Developed new interests
19	22	25	2. Did not have sufficient aptitude or academic success in intended major field
11	11	-	3. Wesleyan department of intended major seemed weak or unattractive
11	19	12	4. Wesleyan department of selected major seemed stronger or more attractive
4	4	6	5. Intended major did not have attractive post-graduate opportunities
7	4	-	6. Influence of other students
11	15	6	7. Influence of members of the faculty
4	11	6	8. Influence of persons not associated with Wesleyan
11	11	19	9. Other

Comment:

7. Which of the following best describes the community which you think of as your home town during your high school days?

15	35	25	1. Suburb in a metropolitan area of more than 2,000,000 population
7	8	5	2. Suburb in a metropolitan area of 500,000 to 2,000,000
4	-	-	3. Suburb in a metropolitan area of 100,000 to 500,000
15	12	25	4. In a city (not a suburb) of more than 500,000
7	12	13	5. In a city of 50,000 to 500,000
26	19	6	6. City or town of 10,000 to 50,000
26	7	13	7. Town of less than 10,000
-	7	13	8. Farm, ranch or other open country

8. Where is your home presently located?

81%	67%	69%	1.	Northeast (Conn., Del., Mass., Me., N.H., N.J., N.Y., Pa., R.I., Vt.)
-	19	5	2.	Southeast (D.C., Fla., Ga., Md., N.C., S.C., Va., W.Va.)
-	-	-	3.	South Central (Ala., Ark., Ky., La., Miss., Okla., Tenn., Texas)
15	11	13	4.	North Central (Ill., Ind., Iowa, Kans., Mich., Minn., Mo., Nebr., N.Dak., Ohio, S.Dak., Wis.)
-	-	13	5.	Pacific and mountain (Ariz., Calif., Colo., Idaho, Mont., New M., Nev., Ore., Utah, Wash., Wyo.)
4	3	-	6.	Outside the Continental U.S.

9. Are you:

14	7	25	1. An only child	19%	30%	19%	3. The youngest child
41	41	38	2. The oldest child	26	22	18	4. An in-between child

10. From what kind of high school or secondary school did you graduate?

52	67	63	1. Public high school	33	22	12	3. Private boarding school
15	11	25	2. Private day school				

11. About how many students were there in your secondary school graduating class?

41	19	31	1. Less than 100	14	26	25	4. 500 to 999
30	33	25	2. 100 to 299	-	3	6	5. 1000 or more
15	19	13	3. 300 to 499				

12. Was the student body of your secondary school

48	30	25	1. All male	48	70	75	3. Co-educational
4	-	-	2. Predominantly male				

13. What is your parents' religious preference?

59	33	44	1. Protestant	-	15	6	4. Other religion
22	11	13	2. Catholic	4	19	6	5. No formal religion
15	22	31	3. Jewish				

14. What is your own religious preference?

33	11	19	1. Protestant	-	19	13	4. Other religion
22	-	6	2. Catholic	33	59	56	5. No formal religion
11	11	6	3. Jewish				

15. In a typical week during the 1967=68 academic terms, how much beer or ale did you drink?

56%	44%	56%	1. None	7%	-%	6%	3. 4-6 beers
33	52	31	2. 1-3 beers	4	4	6	4. More than 6 beers

16. In comparison with your use of beer during this year, would you estimate that during your Freshman year you drank:

48	15	38	1. None	-	27	12	4. Slightly more than now
19	19	19	2. Decidedly less than now	-	12	31	5. Decidedly more than now
33	15	-	3. Slightly less than now	-	12	-	6.

17. In a typical week in the 1967-68 academic terms, how much liquor do you use?

70	67	69	1. None	-	-	-	3. 4-6 drinks
30	30	31	2. 1-3 drinks of liquor	3	-		4. More than 6 drinks

18. In comparison with your use of alcoholic beverages other than beer during this year, would you estimate that during your Freshmen year you drank:

67	30	25	1. None	-	22	19	4. Slightly more than now
15	19	18	2. Decidedly less than now	3	10	38	5. Decidedly more than now
15	19	-	3. Slightly less than now				

19. Do you smoke cigarettes?

74	41	13	1. Never	7	15	38	3. Am a light smoker
15	11	5	2. Have smoked but not recently	4	33	44	4. Am a heavy smoker

20. Do you smoke cigars or a pipe?

59	41	19	1. Never	19	33	25	3. Occasionally
11	15	44	2. Have smoked but not recently	11	11	12	4. Regularly

21. Have you ever smoked marijuana?

100	4	-	No.	-	96	100	Yes.

22. During the 1967-68 academic terms, how frequently have you smoked marijuana?

100	7	-	1. Never	-	-	25	5. Once a week
-	7	-	2. Once	-	-	25	6. Twice a week
-	48	-	3. Less than 5 times	-	-	50	7. More than twice a week
-	37	-	4. Once a month				

23. When did you first smoke marijuana?

100%	7%	-%	0. Does not apply
-	11	6	1. Prior to freshman year
-	7	13	2. Freshman year or following summer
-	56	75	3. Sophomore year or following summer
-	19	6	4. Junior year or following summer

24. Who introduced you to the use of marijuana?

100	7	-	0. Does not apply	-%	67%	38% 4. Peers who were friends
-	-	19	1. Did it on my own	-	-	5 5. Adults of casual aquaintance
-	7	-	2. Peers of casual aquaintance			
				-	-	- 6. Adults who were friends
-	19	38	3. Fellow student(s)			

25. Mark the statement that is most descriptive of your present attitude.

67	26	-	1. Do not intend to use marijuana
33	22	-	2. Will experiment with marijuana but will not continue with its use
-	48	50	3. Will use marijuana occasionally and selectively
-	4	50	4. Will use marijuana regularly

26. What effects have you experienced from your use of marijuana? Describe your characteristic reactions to the drug.

100	15	6	No answer, does not apply
-	4	-	Negative experience, described as unpleasant or unfavorable
-	37	75	Positive experience, described as pleasurable
-	7	6	Ambivalent, describes both favorable and unfavorable reactions
-	26	13	Descriptive statement without emotional or evaluative comment
-	11	-	States there was no significant effect

27. Have you ever had a "bad reaction" to the smoking of marijuana? If yes, please describe.

100	15	6	No answer, does not apply
-	70	44	No, used it but no bad reaction
-	15	50	Yes, used it and had bad reaction
100	85	50	No response or no bad reaction
-	-	13	Dullness, couldn't stay awake
-	4	-	Unfavorable perception of self
-	-	6	Depression
-	-	6	Unpleasantness associated with environment, circumstances, companions
-	7	6	Fear, panic
-	4	19	Paranoia

28. Have you taken any of the drugs listed below? Please indicate frequency.

		Never		Once or Twice		3-5 Times		More than 5 Times	
LSD:	100%	74%	38%	-%	11% 31%	-%	11% 12%	-%	4% 19%
DMT:	100	96	56	-	4 25	-	- 13	-	- 6
Psilocybin:	100	100	100	-	- -	-	- -	-	- -
Peyote:	100	93	100	-	7 -	-	- -	-	- -
Mescaline:	100	93	75	-	4 19	-	3 6	-	- -
Morning glory seeds:	100	96	81	-	4 19	-	- -	-	- -
List other hallucinogenic drugs: Hashish	100	96	56	-	- 6	-	4 6	-	- 31
Cocaine	100	100	94	-	- -	-	- -	-	- 6
Opium	100	96	100	-	4 -	-	- -	-	- -
Heroin	100	100	100	-	- -	-	- -	-	- -
STP	100	96	88	-	4 -	-	- 12	-	- -
Other	100	93	88	-	- 6	-	4 -	-	3 6

29. Have you been offered access to any hallucinogenic drug by an individual associated with Wesleyan University.

54% 27% 12% No. 46% 73% 88% Yes.

30. While at Wesleyan University, have you felt yourself to be under any social pressure to use marijuana or any other hallucinogenic drug?

88% 85% 94% No. 12% 15% 6% Yes.

30. Any additional information or comments that you may care to offer would be welcomed.

Total number of drugs used:			
0 --	100%	67%	13%
1 --	-	19	25
2 --	-	7	38
3 --	-	4	-
4 --	-	-	19
5 --	-	3	-
6 --	-	-	-
7 --	-	-	5

Thank you for your cooperation.